

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : **MATSUSHITA ELECTRIC WORKS LTD**

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(54) DISCHARGE LAMP LIGHTING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a lighting device in a smaller size and at a lower cost, capable of lighting a tubing lamp having severe preheated conditions with a long service life, maintaining a sufficient preheating current in priority while controlling the voltage increase of a smoothing capacitor and easily detecting and controlling malfunction during removal of a lamp and disconnection of filaments.

SOLUTION: A discharge lamp lighting device includes a rectifier DB for rectifying an AC power supply AC, a smoothing capacitor C0 for smoothing the output of the rectifier DB via a diode D1, an inverter using the smoothing capacitor C0 as a power supply, a discharge lamp FL having a pair preheating filaments, a first resonance circuit mounted on a supply passage for high frequency output from the inverter to the discharge lamp FL, a return power supply consisting of a portion of high frequency output the inverter and a second resonance circuit consisting of a series circuit of a preheating inductor Lf and a preheating capacitor Cf connected to both ends of the filaments not connected to the first resonance circuit for the discharge lamp FL.

